(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property **Organization**

International Bureau



10/53451951

(43) International Publication Date 3 June 2004 (03.06.2004)

PCT

(10) International Publication Number WO 2004/046065 A1

(51) International Patent Classification7: C05G 5/00, 1/00, A01C 21/00

C05F 17/00,

(21) International Application Number:

PCT/AU2003/001559

(22) International Filing Date:

21 November 2003 (21.11.2003)

(25) Filing Language:

í

English

(26) Publication Language:

English

(30) Priority Data:

2002952857 2003900867

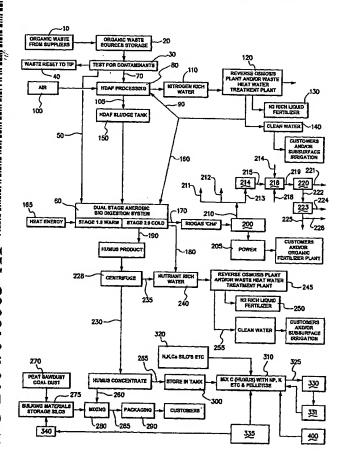
21 November 2002 (21.11.2002) AU 26 February 2003 (26.02.2003)

(71) Applicant (for all designated States except US): INDUS-TRIAL ECOSYSTEMS PTY LTD [AU/AU]; Level 10, 420 St Kilda Road, Melbourne, VIC 3001 (AU).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BEATON, William [AU/AU]; Level 10, 420 St Kilda Road, Melbourne, VIC 3001 (AU). BLANDY, Charles, William, Douglas [AU/AU]; 4 Dryden Street, Canterbury, VIC 3126 (AU).
- (74) Agent: ALLENS ARTHUR ROBINSON PATENT & TRADE MARKS ATTORNEYS; Stock Exchange Centre, 530 Collins Street, Melbourne, VIC 3000 (AU).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR. CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: METHODS FOR IMPROVING CROP GROWTH



(57) Abstract: A method for producing a fertilizer containing organics is described. The method comprises the steps of: a) industrially processing organic material biologically to form an activated sludge or a humus like material; b) removing water from the humus like material to form a synthetic humus and a first intermediate water stream; and c) forming the synthetic humus into agglomerates wherein the agglomerates are suitable for transportation and large scale application as a fertilizer. The method allows the production of organic fertilizers on an industrial scale and allows the products produced by the method to be utilised in composing green waste.